



SEQUENCE LISTING

<110> Browning, Jeffrey L Ware, Carl

<120> LYMPHOTOXIN BETA, LYMPHOTOXIN BETA COMPLEXES,
PHARMACEUTICAL PREPARATIONS AND THERAPEUTIC USES
THEREOF

<130> B129 CP2 DV2 CN

<140> 10/040,281

<141> 2001-11-07

<160> 23

<170> Patentin Ver. 2.1

<210> 1

<211> 726

<212> DNA

<213> Homo sapiens

<400> 1

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<211> 241

<212> PRT

<213> Homo sapiens

<400> 2

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5 10 15

Leu Leu Ala Val Ala Gly Ala Thr Ser Leu Val Thr Leu Leu Leu Ala

20 25 30

Val Pro Ile Thr Val Leu Ala Val Leu Ala Leu Val Pro Gin Asp Gin

35 40 45

Gly Gly Leu Val Thr Glu Thr Ala Asp Pro Gly Ala Gln Ala Gln Gln

50 55 60

Gly Leu Gly Phe Gln Lys Leu Pro Glu Glu Glu Pro Glu Thr Asp Leu

65

70

75

80

95

Ser Pro Gly Leu Pro Ala Ala His Leu Ile Gly Ala Pro Leu Lys Gly

85 90

Gln Gly Leu Gly Trp Glu Thr Thr Lys Glu Gln Ala Phe Leu Thr Ser

100 105 110

Gly Thr Gln Phe Ser Asp Ala Glu Gly Leu Ala Leu Pro Gln Asp Gly

115 120 125

Leu Tyr Tyr Leu Tyr Cys Leu Val Gly Tyr Arg Gly Arg Ala Pro Pro

130 135 140

Gly Gly Asp Pro Gln Gly Arg Ser Val Thr Leu Arg Ser Ser Leu

145 150 155 160

Tyr Arg Ala Gly Gly Ala Tyr Gly Pro Gly Thr Pro Glu Leu Leu Leu 165 170 175

Glu Gly Ala Glu Thr Val Thr Pro Val Leu Asp Pro Ala Arg Arg Gln 180 185 190

Gly Tyr Gly Pro Leu Trp Tyr Thr Ser Val Gly Phe Gly Gly Leu Val 195 200 205

Gln Leu Arg Arg Gly Glu Arg Val Tyr Val Asn Ile Ser His Pro Asp 210 215 220

Met Val Asp Phe Ala Arg Gly Lys Thr Phe Phe Gly Ala Val Met Val 225 230 235 240

Gly

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<211> 201

<212> PRT

<213> Homo sapiens

<400> 4

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5 10 15

Asp Pro Gly Ala Gln Ala Gln Gln Gly Leu Gly Phe Gln Lys Leu Pro

20 25 30

Glu Glu Glu Pro Glu Thr Asp Leu Ser Pro Gly Leu Pro Ala Ala His

35 40 45

Leu Ile Gly Ala Pro Leu Lys Gly Gln Gly Leu Gly Trp Glu Thr Thr

50 55 60

Lys Glu Gln Ala Phe Leu Thr Ser Gly Thr Gln Phe Ser Asp Ala Glu

65 70 75 80

Gly Leu Ala Leu Pro Gln Asp Gly Leu Tyr Tyr Leu Tyr Cys Leu Val

85 90 95

Gly Tyr Arg Gly Arg Ala Pro Pro Gly Gly Gly Asp Pro Gln Gly Arg

100 105 110

Ser Val Thr Leu Arg Ser Ser Leu Tyr Arg Ala Gly Gly Ala Tyr Gly

115 120 125

Pro Gly Thr Pro Glu Leu Leu Glu Gly Ala Glu Thr Val Thr Pro

130 135 140

Val Leu Asp Pro Ala Arg Arg Gln Gly Tyr Gly Pro Leu Trp Tyr Thr

145 150 155 160

Ser Val Gly Phe Gly Gly Leu Val Gln Leu Arg Arg Gly Glu Arg Val

165

170

175

Tyr Val Asn Ile Ser His Pro Asp Met Val Asp Phe Ala Arg Gly Lys

180

185

190

Thr Phe Phe Gly Ala Val Met Val Gly

195

200

<210>5

<211> 450

<212> DNA

<213> Homo sapiens

<400> 5

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<210>6

<211> 149

<212> PRT

<213> Homo sapiens

<400> 6

Pro Leu Lys Gly Gln Gly Leu Gly Trp Glu Thr Thr Lys Glu Gln Ala

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5

10

15

Phe Leu Thr Ser Gly Thr Gin Phe Ser Asp Ala Glu Gly Leu Ala Leu

20 25 30

Pro Gln Asp Gly Leu Tyr Tyr Leu Tyr Cys Leu Val Gly Tyr Arg Gly

35 40 45

Arg Ala Pro Pro Gly Gly Gly Asp Pro Gln Gly Arg Ser Val Thr Leu

50 55 60

Arg Ser Ser Leu Tyr Arg Ala Gly Gly Ala Tyr Gly Pro Gly Thr Pro

65 70 75 80

Glu Leu Leu Glu Gly Ala Glu Thr Val Thr Pro Val Leu Asp Pro

85 90 95

Ala Arg Arg Gin Gly Tyr Gly Pro Leu Trp Tyr Thr Ser Val Gly Phe

100 105 110

Giy Gly Leu Val Gln Leu Arg Arg Gly Glu Arg Val Tyr Val Asn lle

115 120 125

Ser His Pro Asp Met Val Asp Phe Ala Arg Gly Lys Thr Phe Phe Gly

130 135 140

Ala Val Met Val Gly

145

<210> 7

<211> 156

<212> DNA

<213> Homo sapiens

<400> 7

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<211> 52

<212> PRT

<213> Homo sapiens

<400> 8

Leu Ala Leu Vai Pro Gin Asp Gin Gly Gly Leu Vai Thr Giu Thr Ala

1

5

10

15

Asp Pro Gly Ala Gln Ala Gln Gln Gly Leu Gly Phe Gln Lys Leu Pro

20

25

30

Glu Glu Glu Pro Glu Thr Asp Leu Ser Pro Gly Leu Pro Ala Ala His

35

40

45

Leu Ile Gly Ala

50

<210> 9

<211> 17

<212> DNA

<213> Homo sapiens

<400>9

gtytcnggct cytcytc

17

<210> 10

<211> 17

<212> DNA

<213> Homo sapiens

<400> 10

gtytcnggtt cytcytc

<211> 18

<212> DNA

<213> Homo sapiens

<400> 11

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18

<210> 12

<211> 19

<212> DNA

<213> Homo sapiens

<400> 12

gcggccgctt tagagcaca

19

<210> 13

<211> 27

<212> DNA

<213> Homo sapiens

<400> 13

gacagtgata ggcaccgcca gcaacaa

27

<210> 14

<211> 34

<212> PRT

<213> Homo sapiens

<400> 14

Gly Leu Glu Gly Arg Gly Xaa Arg Leu Gln Gly Arg Gly Ser Leu Leu

1

5

10

Leu Ala Val Ala Gly Ala Thr Gly Leu Val Thr Leu Leu Xaa Xaa Val 20 25 30 Pro Ile <210> 15 <211> 25 <212> PRT <213> Homo sapiens <400> 15 Leu Pro Glu Glu Pro Glu Thr Asp Leu Ser Pro Gly Leu Pro Ala 15 5 10 Ala His Leu Ile Gly Ala Pro Leu Lys 25 20 <210> 16 <211> 25 <212> PRT <213> Homo sapiens <400> 16 Xaa Gin Ala Phe Leu Thr Ser Gly Thr Gin Phe Ser Asp Ala Glu Gly 10 1 5 15 Leu Ala Leu Pro Gln Asp Gly Leu Tyr 20 25 <210> 17

<211> 8 <212> PRT

<213> Homo sapiens

<400> 17

Xaa Gln Gly Leu Xaa Xaa Glu Thr

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<210> 18

<211> 5

<212> PRT

<213> Homo sapiens

<400> 18

Ser Ser Leu Tyr Arg

5

<210> 19

<211> 26

<212> PRT

<213> Homo sapiens

<400> 19

Ala Gly Gly Ala Tyr Gly Pro Gly Thr Pro Glu Leu Leu Leu Glu

1

5

15

Gly Ala Glu Thr Val Thr Pro Val Leu Asp

20

25

10

<210> 20

<211> 233

<212> PRT

<213> Homo sapiens

<400> 20

Met Ser Thr Glu Ser Met Ile Arg Asp Val Glu Leu Ala Glu Glu Ala

1

5

10

Leu Pro Lys Lys Thr Gly Gly Pro Gln Gly Ser Arg Arg Cys Leu Phe 20 25 30

Leu Ser Leu Phe Ser Phe Leu Ile Val Ala Gly Ala Thr Thr Leu Phe 35 40 45

Cys Leu Leu His Phe Gly Val Ile Gly Pro Gln Arg Glu Glu Phe Pro 50 55 60

Arg Asp Leu Ser Leu IIe Ser Pro Leu Ala Gln Ala Val Arg Ser Ser 65 70 75 80

Ser Arg Thr Pro Ser Asp Lys Pro Val Ala His Val Val Ala Asn Pro 85 90 95

Gln Ala Glu Gly Gln Leu Gln Trp Leu Asn Arg Arg Ala Asn Ala Leu 100 105 110

Leu Ala Asn Gly Val Glu Leu Arg Asp Asn Gln Leu Val Val Pro Ser 115 120 125

Glu Gly Leu Tyr Leu lle Tyr Ser Gln Val Leu Phe Lys Gly Gln Gly 130 135 140

Cys Pro Ser Thr His Val Leu Leu Thr His Thr Ile Ser Arg Ile Ala 145 150 155 160

Val Ser Tyr Gln Thr Lys Val Asn Leu Leu Ser Ala IIe Lys Ser Pro 165 170 175

Cys Gln Arg Glu Thr Pro Glu Gly Ala Glu Ala Lys Pro Trp Tyr Glu 180 185 190

Pro lle Tyr Leu Gly Gly Val Phe Gln Leu Glu Lys Gly Asp Arg Leu 195 200 205 Ser Ala Glu Ile Asn Arg Pro Asp Tyr Leu Asp Phe Ala Glu Ser Gly

Gln Val Tyr Phe Gly Ile Ile Ala Leu

<210> 21

<211> 260

<212> PRT

<213> Murinae gen. sp.

<400> 21

Met Ile Glu Thr Tyr Ser Gln Pro Ser Pro Arg Ser Val Ala Thr Gly

Leu Pro Ala Ser Met Lys Ile Phe Met Tyr Leu Leu Thr Val Phe Leu

lle Thr Gln Met lle Gly Ser Val Leu Phe Ala Val Tyr Leu His Arg

Arg Leu Asp Lys Val Glu Glu Glu Val Asn Leu His Glu Asp Phe Val

Phe lle Lys Lys Leu Lys Arg Cys Asn Lys Gly Glu Gly Ser Leu Ser

Leu Leu Asn Cys Glu Glu Met Arg Arg Gln Phe Glu Asp Leu Val Lys

Asp lle Thr Leu Asn Lys Glu Glu Lys Lys Glu Asn Ser Phe Glu Met

Gln Arg Gly Asp Glu Asp Pro Gln Ile Ala Ala His Val Val Ser Glu

Ala Asn Ser Asn Ala Ala Ser Val Leu Gln Trp Ala Lys Lys Gly Tyr

130 135

Tyr Thr Met Lys Ser Asn Leu Val Met Leu Glu Asn Gly Lys Gln Leu

Thr Val Lys Arg Glu Gly Leu Tyr Tyr Val Tyr Thr Gln Val Thr Phe

Cys Ser Asn Arg Glu Pro Ser Ser Gln Arg Pro Phe lle Val Gly Leu

Trp Leu Lys Pro Ser Ile Gly Ser Glu Arg Ile Leu Leu Lys Ala Ala

Asn Thr His Ser Ser Ser Gln Leu Cys Glu Gln Gln Ser Val His Leu

Gly Gly Val Phe Glu Leu Gln Ala Gly Ala Ser Val Phe Val Asn Val

Thr Glu Ala Ser Gln Val Ile His Arg Val Gly Phe Ser Ser Phe Gly

Leu Leu Lys Leu

<210> 22

<211> 240

<212> PRT

<213> Homo sapiens

<400> 22

Gly Leu Glu Gly Arg Gly Gly Arg Leu Gln Gly Arg Gly Ser Leu Leu

Leu Ala Val Ala Gly Ala Thr Ser Leu Val Thr Leu Leu Leu Ala Val 20 25 30

Pro lle Thr Val Leu Ala Val Leu Ala Leu Val Pro Gln Asp Gln Gly
35 40 45

Gly Leu Val Thr Glu Thr Ala Asp Pro Gly Ala Gln Ala Gln Gln Gly 50 55 60

Leu Gly Phe Gln Lys Leu Pro Glu Glu Glu Pro Glu Thr Asp Leu Ser 65 70 75 80

Pro Gly Leu Pro Ala Ala His Leu Ile Gly Ala Pro Leu Lys Gly Gln 85 90 95

Gly Leu Gly Trp Glu Thr Thr Lys Glu Gln Ala Phe Leu Thr Ser Gly 100 105 110

Thr Gln Phe Ser Asp Ala Glu Gly Leu Ala Leu Pro Gln Asp Gly Leu
115 120 125

Tyr Tyr Leu Tyr Cys Leu Val Gly Tyr Arg Gly Arg Ala Pro Pro Gly 130 135 140

Gly Gly Asp Pro Gln Gly Arg Ser Val Thr Leu Arg Ser Ser Leu Tyr 145 150 155 160

Arg Ala Gly Gly Ala Tyr Gly Pro Gly Thr Pro Glu Leu Leu Glu 165 170 175

Gly Ala Glu Thr Val Thr Pro Val Leu Asp Pro Ala Arg Arg Gln Gly 180 185 190

Tyr Gly Pro Leu Trp Tyr Thr Ser Val Gly Phe Gly Gly Leu Val Gln 195 200 205

Leu Arg Arg Gly Glu Arg Val Tyr Val Asn Ile Ser His Pro Asp Met

Val Asp Phe Ala Arg Gly Lys Thr Phe Phe Gly Ala Val Met Val Gly

<210> 23

<211> 205

<212> PRT

<213> Homo sapiens

<400> 23

Met Thr Pro Pro Glu Arg Leu Phe Leu Pro Arg Val Cys Gly Thr Thr

Leu His Leu Leu Leu Leu Gly Leu Leu Leu Val Leu Leu Pro Gly Ala

Gin Gly Leu Pro Gly Val Gly Leu Thr Pro Ser Ala Ala Gln Thr Ala

Arg Gln His Pro Lys Met His Leu Ala His Ser Thr Leu Lys Pro Ala

Ala His Leu Ile Gly Asp Pro Ser Lys Gln Asn Ser Leu Leu Trp Arg

Ala Asn Thr Asp Arg Ala Phe Leu Gln Asp Gly Phe Ser Leu Ser Asn

Asn Ser Leu Leu Val Pro Thr Ser Gly Ile Tyr Phe Val Tyr Ser Gln

Val Val Phe Ser Gly Lys Ala Tyr Ser Pro Lys Ala Thr Ser Ser Pro

115 120 125

Leu Tyr Leu Ala His Glu Val Gln Leu Phe Ser Ser Gln Tyr Pro Phe

130 135 140

His Val Pro Leu Leu Ser Ser Gln Lys Met Val Tyr Pro Gly Leu Gln

145 150 155 160

Glu Pro Trp Leu His Ser Met Tyr His Gly Ala Ala Phe Gln Leu Thr

165 170 175

Gln Gly Asp Gln Leu Ser Thr His Thr Asp Gly Ile Pro His Leu Val

180 185 190

Leu Ser Pro Ser Thr Val Phe Phe Gly Ala Phe Ala Leu

195 200 205